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Morphosyntactic properties and scope behavior of ‘subordinate’ clauses in Puma (Kiranti)

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1. Introduction

Puma (ISO639.3: pum) belongs to the Kiranti group of Sino-Tibetan languages and is spoken by about 5,000 - 6,000 people in eastern Nepal, mainly in the districts of Khotang and Udaypur. The language falls into the Southern subgroup of Central Kiranti, sharing a number of distinctive innovations with the Camling language (Sharma (Gautam) et al. 2005). Puma is now documented in the form of a text corpus with grammatical annotations and translations and a trilingual dictionary (including Nepali and English translations), all deposited at the archive of the Documentation of Endangered Languages Project (DoBeS).¹

In this paper we analyze a series of constructions in Puma that show behavior akin to what is traditionally understood by ‘subordination’ — specifically focusability and variable position —, but we exclude from our purview clauses that are subcategorized (e.g. as complements) by the matrix predicate. In Puma, all subordinate constructions are marked by clause-final morphemes. Since Puma clauses are verb-final, this mostly results in verbal affixes or in post-positioned or encliticized conjunctions. We begin by presenting nonfinite converbs in Section 2 and then move on to finite subordinate clauses in Section 3. In Section 4, we discuss possible analyses for all patterns, suggesting a binary distinction between ad-core and ad-clausal subordination along the lines proposed by Bickel (1991, 1993, 1998) and Van Valin (2005). But instead of defending a specific analysis in some chosen framework, we note that there is in fact conflicting evidence on whether the constructions under review really are subordinate in the same sense as this term is used elsewhere. If this is so, the Puma patterns do not fit any possible analysis in theories that assume ‘subordination’ or ‘embedding’ to be a universally uniform configuration.²

2. Converbal constructions

Puma has three distinct nonfinite subordinate clause types that we call converbal constructions here. The three converb types relate simultaneous, purposive, and negated events. Their morphological structure is similar, but they differ in syntactic behavior.

2.1. The simultaneous converb (-so)

The closest linkage in all respects is represented by the converb *-so*, which connects simultaneous events. The S/A argument of the converb clause must not be overt and its reference is strictly controlled by the main clause — in line with a general property of simultaneous converbs in the Kiranti family (Ebert 2003a,b). The following data illustrate this.³

- (1) a. *ri-yaŋ-so* *koseli* *pʌ-itd-oŋ*
 smile-IPFV-SIM.CVB present[NOM] 3sA-give-1sP.PST
 ‘Smiling, he gave me a present.’ (Never: ‘While I smiled, he gave me a present.’)
- b. *ta-yaŋ-so* *pʌ-bud-oŋ*
 come-IPFV-SIM.CVB 3sA-call-1sP.PST
 ‘Approaching, he called me.’ (Never: ‘When I arrived, he called me.’)

The object referents of the connected clauses need not be identical, as the following example shows:

- (2) *khuktitwa-mabuŋwa* *bu-so* *bu-so* *wasə=a*
 a.bird[NOM] call-SIM.CVB call-SIM.CVB bird=ERG
doŋ *tat-i=ni*
 year[NOM] [3sA]bring-3sP=REP
 ‘Calling for the Khuktitwa-Mabungwa bird, the bird brings the (new) year.’
[rit_cint.01.28]

The simultaneous converb does not show any agreement and cannot be inflected for tense, negation, or deontic (modal) categories. It is possible, however, to use the imperfective marker *-yaŋ* as in (1) above, or the antipassive morpheme *kha-* (cf. Bickel et al. (2007)), as in the following example:

- (3) *kha-cop-so* *puks-a*
 ANTIP-watch-SIM.CVB [3sS]go-PST
 ‘He went around, looking at the people.’

Example (4a) shows that converbal clauses can be center-embedded. The choice of an alternative ordering, as in (4b), goes against a tendency to place focused elements closer to the main verb, but there are no strictly syntactic constraints. The converbal clause can also occur after the main clause, as in

(4c):

- (4) a. *ŋa cham mu-so lam ti-ŋa.*
 1s[NOM] song[NOM] do-SIM.CVB path walk-1ss
- b. *cham mu-so ŋa lam ti-ŋa.*
 song[NOM] do-SIM.CVB 1s[NOM] path walk-1ss
 Both: ‘I walk singing.’
- c. *bakhra hi=a chAra pΛ-met, wa*
 goat blood=INS scattering[NOM] 3pA-do[3sP] water
dΛlli=a ni-thok-yaŋ=ni rΛŋ-so
 oil=INS 1nsA[2sP]-sprinkle-IPFV=REP say-SIM.CVB
 ‘They besprinkled (the king) with goat blood, saying: “we besprinkle you with water and oil”.’ [caudandi.raja.01.59-60]

Not all kinds of S and A arguments may control an argument position inside the converbal clause. In parallel to the related language Belhare, control is not possible if the semantic role of the matrix argument is low in agency potential (Bickel 2004: 148). While themes, for example, can control the dependent argument position (cf. (5a)), patients cannot, as shown by (5b).

- (5) a. *ca-so yuŋ-a*
 eat-SIM.CVB [3sS]sit-PST
 ‘He sat eating.’
- b. **kΛkhutda puŋ-so lam ma-a*
 at.night go-SIM.CVB path[NOM] [3sA]lose-PST[3sP]
 ‘Walking in the night, he lost his way.’

With regard to scope properties, simultaneous converbs behave differently under negation than under other main clause operators. Negation scope is disjunct. Negation, which is always marked on the main verb, may semantically affect the subordinate or the main clause, but it cannot scope over both clauses at the same time. In other words, such sentences show what Bickel (1993) calls the ‘Rubin Effect’ (known from perceptually ambiguous figures in Gestalt Psychology; also cf. Van Valin 2005). This is illustrated by the following examples:

- (6) a. *gaph mu-so kama pΛ-mu-e-min*
 talk[NOM] do-SIM.CVB work[NOM] NEG-do-1ps-pNEG
 1. ‘Chatting, we do not work.’ or

2. ‘We work without talking.’
 (Not: ‘We neither worked nor talked.’)
- b. *cham mu-so lam pa-ti-en*
 song[NOM] do-SIM.CVB path NEG-[3sS]walk-NEG.PST
 1. ‘He did not sing walking. (but sitting at home, etc.)’ *or*
 2. ‘He went without singing.’
 (Not: ‘He neither sang nor walked.’)

By contrast, the scope of illocutionary force markers in the main clause appears to be unconstrained. Commanding or questioning may be restricted to just the main clause, it may have only the converbal clause in its scope, or both, depending on the context:

- (7) a. *hai waya deŋ-so khaŋ-a=kanei*
 EXCLA bad.fate[NOM] remove-SIM.CVB watch-IMP=EXCLA
 ‘Oh, watch over us and save us from catastrophes!’ [hiwa_01.88]
- b. *risiwa=cha mu-so=ŋa*
 shamanic.rhythm[NOM]=ADD do-SIM.CVB=FOC
mΛ-ta-a=ku, bura-ci
 3ps-come-PST=NMLZ old.man-ns[NOM]
 ‘Of course they came playing the shamanic drum also, the old men.’ [myth_puma_01.7b]
- c. *risiwa=cha mu-so(=ŋa)*
 shamanic.rhythm[NOM]=ADD do-SIM.CVB(=FOC)
mΛ-ta-a=ku, bura-ci?
 3ps-come-PST=NMLZ old.man-ns[NOM]
 1. ‘Did they COME AND PLAY the drum?’ (conjunct)
 2. ‘Did they PLAY THE DRUM while coming?’ (only converbal clause in scope of question)
 3. ‘Playing the drum, did they COME?’ (only main clause clause in scope of question)

Bickel (1993) and Van Valin (2005: 282ff) suggest that in subordination, the selection of illocutionary scope depends on which clause is in focus. The Puma data cast doubt on this: as far as we can tell, *=ŋa~ŋe* is a restrictive focus particle (translating into English sometimes as ‘just’ or ‘only’, sometimes by stress alone) and *=cha* (usually translating as ‘also’ or ‘even’) is an additive focus particle. In contrast to what one would expect, the use of these markers in converbal clauses does not interact with the possible inter-

pretations. This is shown by the example in (7c), which is a question that was elicited in parallel to the corresponding assertion in (7b): here, all three readings are possible, and this is true regardless of the presence or absence of *=ŋa*.

These findings suggest that converbal clauses can be in what Van Valin (2005) calls the potential focus domain of a sentence and therefore allow constituent focus and *in situ* questions. This is borne out by the occurrence of the additive focus marker *=cha* in (7), and the following example in which an element inside the subordinate clause is focused by the restrictive focus marker *=ŋa*:

- (8) *hʌtni=ŋe lam-so set-so puks-aŋ-i*
 in.this.way=FOC search.for-SIM.CVB hunt-SIM.CVB go-IPFV-1ps
 ‘We are going, searching and hunting just like this!’ [guru_puja_01.040]

In line with this, elements inside the subordinate clause can also be questioned:

- (9) a. *khokku=a sa=lai cop-so yuŋ-yaŋ=ku?*
 3s=ERG who=DAT look-SIM.CVB [3sS]sit-IPFV=NMLZ
 ‘He is sitting (there), watching whom?’
 b. *marcha khakku cham mu-so*
 girl[NOM] which song[NOM] do-SIM.CVB
ta-a=ku?
 [3sS]come-PST=NMLZ
 ‘The girl came, singing which song?’

2.2. The purposive converb (-*si*)

The morphosyntactic properties of the purposive converb — or ‘supine’ as it could also be called — are similar to those of the simultaneous converb. Like the simultaneous converb, the purposive is nonfinite and requires that its S or A argument be covert and that its reference be controlled by the main clause. The controller in the main clause is typically a theme in either spontaneous or caused motion (10a-b):

- (10) a. *puks-a ca-si*
 [3sS]go-PST eat-PURP.CVB
 ‘He went to eat.’

- b. *takku bamna-bo sat aṭh-ora kΛ-bakhra-ci*
 DIST a_caste-GEN seven eight-CLF 3sPOSS-goat-ns[NOM]
nΛu dΛs-ora bakhra khaṭ-si chid-i
 nine ten-CLF goat[NOM] watch-PURP.CVB [3sA]send-3sP
 ‘He sent him to herd the seven, eight, or nine, ten goats of that
 Brahmin.’ [caudandi_raja_01.165]

The purposive converb describes the purpose of the motion event expressed in the main clause. Constructions with this converb cannot be used to express other purposive meanings like ‘do X in order to achieve Y’. For such meanings, the Nepali loan postposition *lagi* ‘for’ is used:

- (11) *rajye tok-ma=bo lagi (*tok-si)*
 kingdom[NOM] get-INF=GEN for (get-PURP.CVB)
laṅpa-ci jyal mΛ-mu
 Kshetri.caste-ns[NOM] trick[NOM] 3ps-do[PST]
 ‘The Kshetris played a trick in order to get the kingdom.’

In contrast to the simultaneous converb, the negation scope in purposive constructions is restricted to the locus of the marking, i.e. the main clause, as shown in (12a). The negation marking on the main verb cannot affect the semantics of the converbal clause. If the converbal clause is to be negated, a different construction is used, with a negation particle (*pee*) following the converb, as in (12b):

- (12) a. *bhoj ca-si pΛ-puks-en*
 party.meal[NOM] eat-PURP.CVB NEG-[3ss]go-NEG.PST
 ‘He did not go to the party to eat.’ (i.e. ‘he did not go’.)
 b. *bhoj ca-si pee,*
 party.meal[NOM] eat-PURP.CVB NEG
kha-cop-si puks-a
 ANTIP-look-PURP.CVB [3ss]go-PST
 ‘He did not go to the party to eat, but to look at people.’

A dependent clause headed by the purposive converb can be focused by the markers *=ṅa* and *=cha*, in the same way as with the simultaneous converb:

- (13) a. *e tij-e pa=che*
 EXCLA a_person-TEK.GEN father[NOM]=ADD
biha ca-si=ŋe puks-a=ku
 marriage[NOM] eat-PURP.CVB=FOC [3sS]go-PST=NMLZ
rɔichɔ
 MIR
 ‘Hey! Tij’s father also went to the wedding just to eat?’ [convers.15.49]
- b. *khannanin=na kha-cop-si=cha*
 2p=TOP ANTIP-look-PURP.CVB=ADD
tɔ-i-yaŋ-i-min
 2-come.down-IPFV-2ps-pNEG
 ‘You, you did not even come down to watch them.’ [convers.15.061.b]

Again following the same pattern as the simultaneous converb, clauses headed by a purposive converb allow question words and constituent focus in them:

- (14) a. *doro mu-si tɔ-ta-a-ku?*
 what do-PURP.CVB 2sS-come-PST-NMLZ
 ‘What did you come for?’ (Lit.: ‘You came to do what?’)
- b. *nana patrika=cha cop-si*
 elder.sister[NOM] magazine[NOM]=ADD watch-PURP.CVB
pustakalai-do puks-a=ku.
 library-LOC [3sS]go-PST=NMLZ
 ‘Sister went to the library to look at the magazines as well.’
- c. *nana ‘Slumdog Millionaire’=ŋa*
 elder.sister[NOM] S. M.[NOM]=EMPH
cop-si sinema-do puks-a
 watch-PURP.CVB cinema-LOC [3sS]go-PST
 ‘Sister went to the cinema, just to watch *Slumdog Millionaire*’.
 (i.e. she is not interested in any other films.)

The scope of main clause illocutionary force markers is constraint-free, but it is mostly found on the converb clause:

- (15) *hen khatni puks-i=llɔ? ma ci-e=ku,*
 now where.to go-1ps=PTCL what[NOM] do-1ps=NMLZ
mela mu-si puks-i=ku he?
 market[NOM] do-PURP.CVB go-1ps=NMLZ PTCL
 ‘So where shall we go now? What will we do, will we go to the

market to do some business?' [convers.16.32-33]

In this example, taken from natural speech, it is beyond doubt that the clausal unit under the scope of the truth-value focus is only the converbal clause, because the content of the main clause (*puksi* 'we will go') was already active in discourse. But example (16) shows that the illocutionary force marker can also scope over the main clause. Hence, the scope of illocutionary force markers does not appear to be strictly constrained in this construction.

- (16) *biha ca-si puŋ he pΛ-puŋ-nin? pee,*
 wedding eat-PURP.CVB go[3SS] or NEG-go[3SS]-NEG? no,
khΛtni=cha pΛ-puŋ-nin
 where=[ADD] NEG-go[3SS]-NEG
 'Did he go to the wedding to eat or did he not go? No, he did not go anywhere.'

Purposive clauses can occur before or after the main clause (cf. examples (10)). They can also be center-embedded inside the main clause, which is evident from the fact that in examples like (13a), (14b), and (14c), the nominative case on the first argument is assigned by the intransitive main clause predicate. The converbs in these cases are transitive and would assign ergative case. This observation also confirms the claim that purposive converbs do not license overt S/A arguments within their own clause.

2.3. The negative converb (*men-*)

The negative converb conveys that the main event takes place without some other event happening in relation to the main event, as is illustrated by the data in (17). While the negative converb is similar to the other converbs in being nonfinite, its syntactic behavior is very different. There is no obligatory control of any argument, so that examples like (17b) or (17c) are equally grammatical. Any and all arguments can be overtly realized (although often they aren't in situated discourse). Case is assigned in the same way as in independent main clauses:

- (17) a. *jaʃha=na* *ʌkku* *ʃuhura=na* *ŋa=a=na*
 [abusive]=TOP PROX orphan[NOM]=PTCL 1s=ERG=TOP
men-set *pʌ-let-nʌŋ*
 NEG.CVB-kill NEG-release-1sS/A.NEG
 ‘Damn, this orphan, I will not let him out of here alive!’ [cau-
 dandi.raja.180]
- b. *kho=a* *men-li* *ŋa=a* *pʌ-sin-nʌŋ*
 3s=ERG NEG.CVB-tell 1s=ERG NEG-know-1sS/A.NEG
 ‘Without him telling (me), I will not know.’ or ‘I won’t know
 unless he tells (me).’
- c. *puks-a* *khakhutd-a* *ghasa*
 go-IMP [3sS]become.night-PST grass[NOM]
men-pak
 NEG.CVB-arrange
 ‘Go! It’s getting dark, and the grass isn’t cut yet!’ [pum.people.02.144]

The prefix *men-* does not combine with other converbal or infinitival affixes, unlike in some other Kiranti languages (Ebert 1993). But what is possible is to combine *men-* with conjunctions that elsewhere occur only after finite clauses (and not with other converbs). In the following example, the negative converb combines with the conditional conjunction *nalo* (cf. Section 3.2) and the sequential conjunctions *kina*:

- (18) a. *si-aŋ* *paa* *ni* *ni* *men-ca* *nalo* *khakkinma*
 [3sS]die-IPFV when REP REP NEG-eat COND ghost
lis-i *ni=ku* *ni* *en-u-ŋ=ku* *thyo*
 be-1pIS REP=NMLZ REP hear-3sP-1sA=NMLZ AUX.PST
 ‘I had heard that if one doesn’t eat at the time of dying, we
 become a ghost.’ [LH_M.01.725]
- b. *kama* *men-mu* *kina* *yuŋ-a* *lʌ* *ta*
 work[NOM] NEG.CVB-do SEQ [3sS]stay-PST PTCL PTCL
 ‘Without doing the work, it remained.’ (i.e. ‘Because no one did
 it, it remained.’)

The negative converb also combines with the conjunction *paa* ‘when, if, while’, yielding a construction with the meaning ‘during a time without the event denoted by the converb’, i.e. ‘before the event’. The following example from a narrative illustrates this:⁴

- (19) *pisacini dʌŋkini men-ta paa=ŋa*
 female.oppressor witch[NOM] NEG-come while=FOC
pʌli=ŋa ŋa cʌi khʌrkhu-ro-do pak-oŋ=nʌŋ
 before=FOC 1s[NOM] TOP big.pot-LOC put-1sp.IMP=PTCL
 ‘Put me into a big pot before the witch has arrived.’ [myth_dhami.198]

Another distinctive property of the negation converb is its focus behavior. In contrast to the other converbs, the focus markers *=ŋa* and *=cha* are not permissible on negative converbs. What is frequently found instead is the marker *=ku*. This marker is basically a nominalizing clitic (and we gloss it as such). Its main function lies in forming nominal modifiers, attributive (relative) clauses and certain types of complement clauses (Schackow 2008), but in line with a pan-Sino-Tibetan trend (Bickel 1999), the same marker is also used as a focus marker to signal that a clause contains potentially controversial information. As such it is often used in questions or as a marker of contrastive focus, as can be seen in examples like (7c), (9a), (9b), (13a), (14a), (14b), or (15). The nominalizer always attaches to verbs. In the following examples, *=ku* occurs on a negative converb clause:

- (20) a. *ai-samma tan sapten-do yonni-ci=on*
 today-until village village-LOC friend-ns=COM
khonjin=lo men-li=ku rʌ
 [3ss]be.angry=ADV NEG-be=NMLZ and
cain=lo men-li=ku hunale=a ...
 [3ss]be.not.nice=ADV NEG-be=NMLZ because=ERG
 ‘Because until today, they were not behaving in bad way and they were not angry with friends in the villages ...’ [myth_lang.01.061]
- b. *ʌ gʌhʌna men-itd=ku=bo=cha*
 FILLER ornament[NOM] NEG-[3ss]give=NMLZ=GEN=ADD
thulo thulo mʌ-li=ŋa
 big big 3ps-be=FOC
 ‘The [property] of those who would not give jewelry [for the wedding] is also really big.’ [tongmalung.01.40]

In (20a), *=ku* appears to focus the proposition (‘because it was the case that they were not behaving in a bad manner and not being angry with the friends in the village until today’). In (20b), *=ku* functions as a nominalizer, creating a headless relative clause (‘those who would not give’).

A critical property of *=ku* as a focusing device is that it can only occur on clauses, where it is placed at the end of the verb (which is in most cases the last element in the clause), and *=ku* cannot occur on sub-constituents inside a clause. This suggests that *men*-clauses count as adjoined clauses that are not embedded but instead behave like fully finite clauses linked by conjunctions. In line with this, center-embedded negative converbs are ungrammatical (cf. example (21a)). Only when another conjunction (here *samma* ‘until’, borrowed from Nepali) is added, can the clause be center-embedded (cf. example (21b)). In all other cases, the *men*-clause must occur outside the main clause, as in example (21c).

- (21) a. **ma=a, ba men-ta, cama pA-ca-nin*
 mother=ERG father NEG.CVB-come food NEG-eat-NEG
 Intended: ‘Mother does not eat until father comes.’
- b. *ma=a, ba men-ta-samma, cama*
 mother=ERG father NEG.CVB-come-until food
pA-ca-nin
 NEG-eat-NEG
 ‘Mother does not eat until father comes.’
- c. *ba men-ta, ma=a cama pA-ca-nin*
 father NEG.CVB-come mother=ERG food NEG-eat-NEG
 ‘Mother does not eat until father comes.’

Clauses headed by the simultaneous or the purposive converbs, by contrast, do not count as adjoined finite clauses because they are not compatible with the clause-final focus marker *=ku* (**mu=ku-so*, **mu-so=ku*, **mu-si=ku*, **mu=ku-si* are all ungrammatical). These converbs can only host focus markers like *=ŋa* or *=cha*, which in turn are banned from independent finite clauses and are used only on sub-clausal constituents (of nominal, verbal, or adverbial type). This suggests that in contrast to the negative converbs, simultaneous and purposive converb clauses are embedded in the main clause.

There is one type of exception where the negative converb behaves like an embedded constituent and can host restrictive focus clitics. This concerns cases in which the use of the converb combines with auxiliary verbs like *yukd-~yund-*, which are no longer attested as full lexical predicates.⁵

- (22) *jhara=ku=na ke=a khoi men-en=ŋa*
 all=NMLZ=EMPH 1pi=ERG INDSV NEG-hear=FOC
yukd-u-m men-khaŋ=ŋa yuŋd-u-m
 AUX-3sP-1pA NEG-see=FOC AUX-3sP-1pA
 ‘All of us, we have not heard or seen anything.’ [rit.cint.1.139]

It is likely that this usage of the negative converb reflects the grammaticalization of periphrastic tense forms. In such forms, the converb loses its status as a fully-fledged adjoined clause, and this explains why it can host clitics like =*ŋa* or =*cha*.

While focusing negative converb clauses is strongly constrained, we are not aware of any constraint on constituent focus or question formation with converb clauses – in this regard the negative converb behaves exactly like all other converbs. An example is given in (23) (also illustrating that the converb can occur after the main clause):

- (23) *uŋ-bo pak-ma=na dot-yaŋ=ku. odho=ŋa*
 1sPOSS-GEN set.up-INF=PTCL must-IPFV=NMLZ here=FOC
o ka-bhauju-bo pak-i
 PROX 2sPOSS-elder.brother’s.wife-GEN [3sA]set.up-3sP
saila-bo=cha men-pak
 third.born.male-GEN=ADD NEG-set.up
 ‘I have to set up my own (paddy field). Just here, he set up your Bhauju’s (field), without also having set up Saila’s (field).’ [convers.12:39]

3. Finite subordination

There are two patterns in which finite clauses can be linked in Puma. One type involves conjunctions like *paa* ‘if, when, while, and’ and links fully finite sentences that can also contain mirative and evidential particles (such as the mirative particle *raicha*, borrowed from Nepali) as well as post-clausal afterthoughts (right-detached elements). This type corresponds essentially to what is traditionally called ‘coordination’, although the semantics sometimes corresponds to what is expressed by subordination in other languages. The other type involves a small set of conjunctions and requires that the dependent clause does not contain miratives or post-clausal afterthoughts, i.e. clauses are not accessible to fully-fledged, independent modulation of information structure. This makes these clauses similar to what is traditionally called ‘subordi-

nation'. Here, we limit the discussion to the second, subordination-like type, and within this, we concentrate on the most frequently used conjunctions, *lo* and *nalo*.

3.1. The adverbial (=lo)

The adverbial marker =*lo* may convey various semantic relations, as long as one event can be conceptualized as happening somehow alongside the other. It can indicate manner, cause, purpose, condition, or simultaneity. In some other Kiranti languages, the morpheme used in these functions is identical to the nominal comitative case marker, for instance in Belhare (Bickel 1993), but in Puma, =*lo* only cliticizes to clauses; the nominal comitative involves a different marker (-*oŋ*). The dependent verb in adverbial clauses is fully inflected, and we are not aware of any constraints on the reference of its arguments. No clitics or particles of any kind can intervene between the inflected verb and =*lo*.

Consider the following data:

- (24) a. *baŋ-ma tA-si-aŋ=lo baŋ-a=na ŋa=a*
 talk-INF 2sS-want-IPFV=ADV talk-IMP=PTCL, 1s=ERG
en-na
 listen-1sA.2sP
 'If you want to talk, then talk. I will listen to you.' [convers.17:33]
- b. *dress khaŋ-u-m=lo ŋess-i*
 school.uniform[NOM] see-3sP-1pA=ADV put-IMP
 'Put on the uniform so that we can see it!'
- c. *okolo=na khada khaŋ-a ni=lo*
 this=PTCL where see-IMP [3sS]be.nice=ADV
 'Look benevolently onto us!' (a request to the ancestors) [hop-macham.01.038]

Example (24a) has conditional semantics. In this clause and in the purpose clause in (24b) the illocutionary force of the main clause does not extend into the subordinate clause. Data like (24c), however, suggest that the illocutionary scope can also extend into the dependent clause, but we are not sure how general this possibility is. At any rate, there is no constraint on constituent focusing or question formation inside a *lo*-clause:

- (25) *khasayni ray=lo pΛ-chaps-a?*
 how [3sS]say-ADV 3nsA-decide-PST[3sP]
 ‘They decided, saying how?’

Example (25) involves a simultaneous relation between the two events. It also involves coreference of the A argument. Such coreference appears to trigger deletion of agreement markers in the *lo*-clause (regular would be *pΛray=lo* ‘while they say’), but the conditions on this are not fully understood yet.

Main clause negation markers do not scope over the dependent clause; instead, these clauses are negated independently:

- (26) a. *pΛ-khay-in=lo kuss-i*
 NEG-[3sA]see-NEG[3sP]=ADV [3sA]hide-3sP
 ‘She hid it, so that he would not see it.’
 b. *khoci=a ni-pΛ-tupd-in=lo bay-ma*
 3p=ERG 3nsA-NEG-understand[3sP]-NEG=ADV talk-INF
dot
 must
 ‘We have to talk in such a way that they do not understand.’
 [myth_lang.01.180.a]

Subordinate clauses in *=lo* count as adverbial sub-constituents of the main clause. This is evidenced by the fact that they can host the focus marker *=ŋa*, which is limited to sub-constituents:

- (27) *akdya si-a-lo=ŋa pΛ-qher-a=ni ...*
 severely [3sS]die=PST=ADV=FOC 3A-beat-PST[3sP]=REP
 ‘They beat him severely, as if he should die!’ Nepali: (*marne jastai*)
 [myth_tuwarong.042a]

In return, the clause-final focus marker *=ku* cannot occur in *lo*-clauses (**si-a=ku=lo*, **si-a=lo=ku*). The embedded status of *lo*-clauses is confirmed by examples like the one in (28), which demonstrate that these clauses can be center-embedded:

- (28) *roduy bhanda aru pacha o bela ta=lo*
 Rai COMPAR other clan PROX time [3sS]come=ADV
metdΛŋ-ci
 NEG.EXIST.NPST-ns
 ‘Until this time, there are no other clans except Rai (here).’ [heny-

ongcha.083]

The clause *o bela talo* literally means ‘until this time is coming’ and it occurs in the middle of the matrix clause. In some cases, this usage has led to the lexicalization of adverbs, and when asked about expressions like *khak=lo*, literally ‘when it is bitter’ native speakers insist that they are non-composite words that should be included as adverbs in a dictionary.

3.2. The conditional (*nalo*)

The conditional conjunction *nalo*⁶ is related to the adverbial conjunction *=lo*, as the morpheme has most probably developed from a combination of *=lo* with the topic clitic *=na*.⁷ The topic marker is most frequently translated by Nepali *ta*, which signals that the speaker assumes the hearer to already know about the so-marked part of the utterance. The combination of *=lo* with a topic marker would have been facilitated by the fact that *=lo* alone already covers conditional meanings (cf. (24a) above), and that conditions have strong semantic affinities to topics worldwide (Marchese 1977; Haiman 1978).

Unlike *=lo* alone, which covers a large range of interpropositional relations, *nalo* is limited to conditionality. It can combine with both finite (cf. example (29a)) and nominal clauses (cf. example (29c)):⁸

- (29) a. *ʃa=a=na khannani khaŋ-na-nin nalo*
 1s=ERG=PTCL 2p[NOM] see-1sA.2p-2p COND
pʌ-sin-na-ni-min
 NEG-know-1sA.2p-2p-NEG
 ‘If I see you, I won’t recognize you.’ [convers.18.069]
- b. *baŋ-ma dot nalo namma lis-a=ku? ʌru*
 speak-INF must COND what happen-PST=NMLZ other
bela nalo thupro uŋ-pimasiwa lon
 time COND much 1sPOSS-word[NOM] [3ss]come.out
 ‘What happens if I have to talk? On other occasions my words
 come out abundantly.’ [convers.17.046.b]
- c. *ʌʌ-ra nalo ʌʃilo*
 two-CLF COND easy
 ‘If [there are] two [knives], it will be easier [to kill the pig].’
 (i.e. ‘It’s easier with two knives.’) [khali.acheta.059]

- d. *wachon nalo duŋ=ku hola*
 home.made.beer[NOM] COND [3ss]drink=NMLZ probably
 ‘If it was beer, he would probably drink.’ [rice.feed_01.346]

The inherent topicality of the conditional can be amplified by adding the topic marker =*na*, again after the conjunction (a possibility which does not seem to be given for plain *lo*-conditionals or converbs — at least, it is not attested in the corpus):

- (30) *Λk qala Λk qala nalo=na ŋa=a*
 one branch[NOM] one branch[NOM] COND=TOP 1s=ERG
cokd-u-ŋ-cΛ-ŋ=ni
 join-3P-1sA-ns-1sA=REP
 ‘If [you throw them] branch by branch, I will join them [he said].’
 [myth_dhami.71]

Conditionals occur mostly in initial position, but especially in conversations, they can also occur after the main clause:

- (31) *lu ŋa tikaŋ pΛ-kΛp-nΛŋ*
 O.K. 1s[NOM] ticket[NOM] NEG-cut-1ss.NEG
rel=ŋa pΛ-sin-nΛŋ nalo.
 train[NOM]=EMPH NEG-know-1ss/A.NEG COND
ka-tikaŋ-bo pΛisa nasa li
 2sPOSS-ticket-GEN money[NOM] destroyed [3ss]be
 ‘O.K., I wouldn’t buy a ticket if I didn’t know the (right) train. The
 money for your ticket will be lost.’ [LH_M_01.154]

By contrast to *lo*-clauses, conditionals are not attested in center-embedded position in our corpus.

Conditional clauses marked by *nalo* express presuppositions, and, as such, they never fall into the scope of main clause illocutionary force markers. But *nalo*-clauses can be focused, and, moreover, they can include constituent focus:

- (32) a. *pΛŋ pheri en-dima-bo=cha caha*
 CONN again 1piPOSS-female.ancestors-GEN=ADD need
li=ku nalo, ahet mu-m
 be=NMLZ COND, later do-1pA
 ‘If it is necessary [to raise] our female ancestors’ [souls] as

- well, we do that afterwards.’ [myth_tuwarong.094]
 b. *lu* *ŋa=che* *tA-ca-ŋa* *nalo* *ca-oŋ*
 O.K. 1s=ADD 2sA-eat-1sP.NPST COND eat-1sP.IMP
 ‘O.K., if you will eat me as well, eat me!’ [jackle-hen.01.025]

This confirms the observation made in Section 2.1 that illocutionary scope behavior is independent of focusability in Puma.

Note that the focus marking in (32a) is indicated by *=ku*, which only occurs on adjoined clauses. Focus markers like *=ŋa*, which are limited to embedded clauses, are not attested in *nalo*-clauses.

4. Discussion

Table 1 summarizes the properties of the five patterns of clause linkage that were discussed here. All patterns allow variable positions before or after the main clause, all subordinate clauses allow some kind of focus marking, and none of the patterns constrain the occurrence of constituent focus or question words inside the dependent clause. These three properties, which are uniform, are not included in the table. In the listing of scope properties, ‘disjunct’ means that the scope extends to either the main clause or the dependent clause but never to both at the same time; ‘local’ means that main clause operators only have scope over the main clause itself; and ‘constraint-free’ means that the scope can be extended to any or all clauses.

	control	finite	focus <i>=ŋa</i>	focus <i>=ku</i>	negation scope	illocution scope	topic <i>=na</i>	center- embedding
Simultaneous CVB (-so)	yes	no	yes	no	disjunct	constraint-free	no	yes
Purposive CVB (-si)	yes	no	yes	no	local	constraint-free	no	yes
Negative CVB (men-)	no	no	no	yes	local	no data	no	no
<i>=lo</i> (‘when, if, while’)	no	yes	yes	no	local	constraint-free (?)	no	yes
<i>nalo</i> (‘if’)	no	yes	no	yes	local	local	yes	no

Table 1. Puma subordination types compared

As noted earlier, elements that can be focused by *=ŋa*, but not by *=ku*, are sub-clausal constituents, while those that can be focused or nominalized

by *=ku* are fully-fledged clauses that are adjoined to other clauses. This suggests that the simultaneous and purposive converbs and *lo*-clauses are embedded. This is confirmed by the fact that all three clause types can be center-embedded, as was shown in (4a), (13a), and (28). Since none of the dependent clauses are subcategorized by the main clause predicate, this type of embedding would seem to involve an ‘adverbial’ or ‘periphery’ position. The negative converb and *nalo*-clauses, by contrast, are adjoined to entire clauses. For the negative converb, this receives additional support from the observation made in Section 2.3 that these converbs can also host the general-purpose conjunction *paa* ‘and, if, when’, which in other contexts serves to coordinate independent sentences. The distinction between embedded and adjoined clauses observed here corresponds to the distinction between ‘peripheral’ vs. ‘ad-sentential’ subordination proposed by Bickel (1991, 1993, 1998), which is now incorporated into the theory of Role and Reference Grammar under the labels ‘ad-core’ vs. ‘ad-clausal’ subordination (cf. Van Valin (2005)).

The distinction between ad-core and ad-clausal subordination cross-cuts all other properties surveyed in Table 1. With regard to the presence of referential control and the question of finiteness, this is not surprising because these are known to be independent variables of clause linkage. What is more surprising is that the distinction between ad-core and ad-clausal subordination also cross-cuts scope behavior. As subordinate clauses, both ad-core and ad-clausal clauses are expected to show either local or disjunct scope, but the ad-core subordinated simultaneous and purposive converbs, and possibly also *lo*-clauses, allow conjunct scope as well (cf. examples (7), (16), and (24)). This leads to an analytical conundrum: on the one hand, there is evidence that simultaneous converb clauses and *lo*-clauses are embedded as adverbials. This, as well as the fact that they can be focused and allow for variable position, makes them subordinate. On the other hand, there is evidence that they can fall under the scope of main clause illocutionary markers together with the main clause itself (i.e., they can have conjunct scope). This makes them different from subordinate clauses, more akin to what Foley & Van Valin (1984) and Van Valin (2005) call ‘cosubordinate’ clause.

Puma ad-core subordination is not only unexpected with regard to the availability of conjunct scope, but also with regard to the fact that such clauses can contain question words and allow constituent focusing. Van Valin (2005: 282ff) suggests that this is expected under ad-clausal subordination because it involves the concatenation of independent propositions, and any one of these can be expressed as an independent speech act. But it is not expected

for embedded, ad-core clauses because in this case, propositions are stacked together and can only be expressed as a single speech act. It is possible that Puma ad-core clauses are embedded only in syntax and that semantically, they behave like ad-clausal structures. One piece of evidence for this is that *lo*-clauses cover conditionals, an interpropositional relation that is covered elsewhere in Puma by ad-clausal constructions (*nalo*-clauses). But the same argument would not extend to the simultaneous and the purposive converb, which cover tighter interpropositional relations.

In Section 2.1 we noted that the use of focus markers on dependent clauses does not interact with the scope of main clause illocutionary markers. This opens up the route to an alternative analysis: information structure, including the possibility of forming questions, is independent of clause linkage syntax. A similar observation was made for the related language Belhare in Bickel (1993), although not with regard to focusing but with regard to topicalizing devices. In Belhare, attaching a topic marker to a converb clause does not change its syntactic status as ad-core embedded and, by the same token, it does not change its scope behavior.

5. Conclusions

This chapter has provided further evidence for the distinction between peripheral (ad-core) and ad-sentential (ad-clausal) subordination proposed by Bickel (1991, 1993, 1998) and Van Valin (2005). In many languages, especially in the better-known European languages, this distinction is blurred because both structures involve the same set of conjunctions and share many (but not all) syntactic properties. This matter of affairs has given rise to the all-encompassing analytical concept of ‘adverbial subordination’. This concept is not suited for languages like Puma, where the two clause types do not overlap.

But what about the notion ‘subordination’ itself? We used this term in the title of the chapter and defined it by variable position and focusability of dependent clauses. However, understood as a cross-linguistically applicable term, ‘subordination’ entails more than just these two properties. For example, it typically entails disjunct scope behavior, and for some authors, e.g. for Cristofaro (2003), it also entails that dependent clauses cannot be asserted or include questions. As we have seen in this chapter, all dependent clauses we surveyed can have their own illocutionary force, and they can include ques-

tions. Also, in some cases, main clause illocutionary markers can scope over both the dependent and the main clause.

One could of course assume that the Puma constructions under review are not subordinate at all. But this would not help much since the constructions also do not fit standard definitions of cosubordination or coordination. Yet another option would be to abandon some of the traditional criteria of subordination and to redefine the term by variable position and focusability alone. But there is a risk that the next language we study will show that variable position should be stripped as a necessary implication as well — indeed that would be the case in, say, Turkish. As a result, ‘subordination’ would then be equivalent to ‘focusability’ and would make no further predictions on what to expect. This empties the concept of all analytical purposes. Given this, it is perhaps wiser to start with the individual properties directly, that is, not to analyze languages in terms of holistic categories, but in terms of more fine-grained descriptive categories, like those that we put together in the table in Section 4 and not to worry about whether individual structures fit or do not fit preconceived categories like ‘subordination’ that entail rigid correlations between properties (cf. Lehmann 1988; Bickel in press).

Abbreviations

ADD	additive focus	ns	nonsingular
COMPAR	comparative	p	plural
d	dual	PTCL	particle
EMPH	emphatic	REP	reportative
e	exclusive	s	singular
EXCLA	exclamation	SIM	simultaneous
i	inclusive	TEK.GEN	teknonymic genitive
MIR	mirative		

Notes

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2. We limit our theoretical discussion to Role and Reference Grammar (Van Valin 2005), because this theory has the most elaborate analytical apparatus to handle clause linkage.
3. Examples without a reference were elicited; examples taken from the corpus are followed by a reference in brackets.
4. Note that the negative marker *men-* is under the scope of the conjunction *paa* and not vice-versa; the sentence could not express 'not while the witch is coming'.
5. Etymologically, *yukd-* ~ *yuyd-* goes back to a transitive verb 'to keep'. There is no evidence for a semantic distinction between the two stem forms; *yuyd-* seems to be more common in fast speech.
6. From all we know, there is another conjunction *nide* ~ *nidhe* which behaves exactly like *nalo* but is used for unfulfilled conditions.
7. The particle *na* has been identified as a topic marker in other Kiranti languages (Ebert 2003a).
8. The combination with NPs is quite frequent. Puma has no identificational copula, and this is why we analyze these structures as dependent nominal sentences. (There is only an existential copula *yuyay*, with the negative form *metdaq*.) Alternatively, one could analyze structures like [NP *nalo*] as framework topics (Chafes (1976) 'Chinese-style') *tout court* since these have a thetic structure anyway (Bickel 1993).

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